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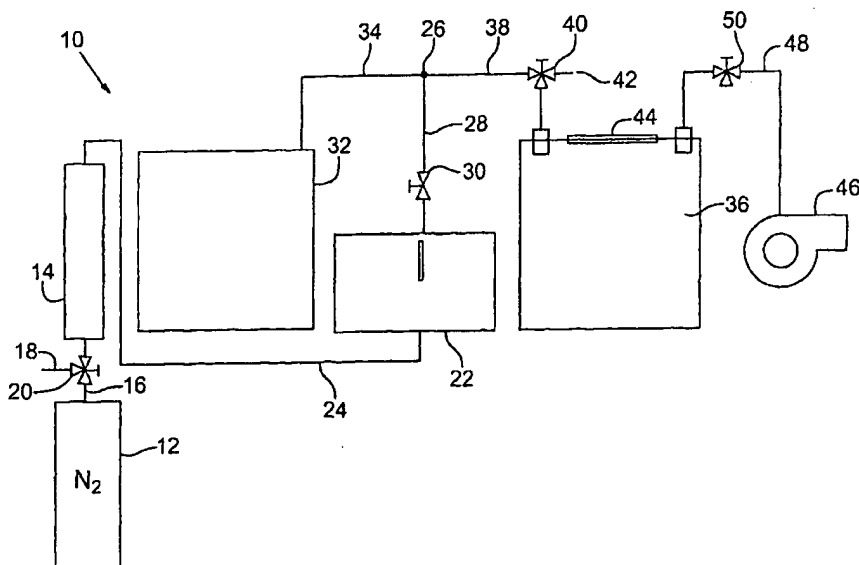
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR BIOWEAPON DECONTAMINATION



(57) Abstract: The present disclosure relates to the decontamination of articles contaminated (or thought to be contaminated) with bioweapons, such as methods and apparatus for decontaminating articles contaminated with sporulated bioweapons. In some embodiments, the methods are methods of decontaminating an environment, for example a room or building contaminated with a bioweapon.

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FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments*

**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv))*

**(88) Date of publication of the international search report:**

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*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/000766

A. CLASSIFICATION OF SUBJECT MATTER  
INV. A61L2/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
A61L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/059401 A (CDG TECHNOLOGY, INC; ROSENBLATT, AARON A; MCWHORTER, THOMAS E) 24 July 2003 (2003-07-24) the whole document	24-38
X	US 4 681 739 A (ROSENBLATT ET AL) 21 July 1987 (1987-07-21) the whole document	24-38
X	EP 0 159 660 A (THE SCOPAS TECHNOLOGY COMPANY, INC; JOHNSON & JOHNSON) 30 October 1985 (1985-10-30) the whole document	24-38
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the International filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

10 November 2005

Date of mailing of the international search report

03.05.06

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/000766

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>KNAPP J E ET AL: "CHLORINE DIOXIDE AS A GASEOUS STERILANT"  MEDICAL DEVICE AND DIAGNOSTIC INDUSTRY,  CANON COMMUNICATIONS, SANTA MONICA, CA,  US, September 1986 (1986-09), pages 48-51,  XP001153334  ISSN: 0194-844X  the whole document</p> <p>-----</p>	1-38

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2005/000766

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-20, 24-38

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US2005/ 000766

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-20,24-38

Method and apparatus for decontaminating an article comprising (a) chlorine dioxide as active agent introduced into a chamber/environment; (b) (means for) humidification of said chamber; and (c) a vacuum generator.

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2. claims: 21-23

Method for decontaminating a room or building comprising (a) chlorine dioxide as active agent introduced into a room/building/environment; and (b) humidification of said environment.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/000766

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03059401	A	24-07-2003	AU 2002365192 A1 GB 2397524 A	30-07-2003 28-07-2004
US 4681739	A	21-07-1987	NONE	
EP 0159660	A	30-10-1985	CA 1245034 A1 DE 3584027 D1 HK 12992 A JP 1876170 C JP 5086233 B JP 61033659 A SG 107491 G	22-11-1988 17-10-1991 21-02-1992 07-10-1994 10-12-1993 17-02-1986 14-02-1992